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10/644,715

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EXAMINER

MOUTAOUAKIL, MOUNIR

ART UNIT

PAPER NUMBER

2616

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------|---------------------------------|--|
| Office Action Summary | Application No. 10/644,715 | Applicant(s) TSUJI, TOMOHARU | |
| | Examiner Mounir Moutaouakil | Art Unit 2616 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Application 10/759355, filled on 01-19-2004, has the same title.

Claim Objections

2. Claims 4, and 20 are objected to under 37 C.F.R 1.75 because of the following informalities:

In claim 4, line 2, "further" needs to be changed to "further". Similar issue occurs in claim 20, line 2.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 12, line 4, "the identification information" lacks antecedent basis.

Claims 13-16 are rejected because they are dependent on claim 12.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-3, 17-19, 27, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Goodman et al. Hereinafter referred to as Goodman.

Regarding claim 1, 17, 27, and 28. Goodman discloses a data transmission system comprising: a master unit (see page 292, left column lines 9-37, multiple terminals communicate with a single base station); and a plurality of slave for wirelessly transmitting transmission data to the master unit under TDMA scheme (see page 292, left column lines 9-37, multiple terminals communicate with a single base station wirelessly using TDMA scheme), wherein each of the slave units includes communications means for performing signal transmission and reception with the master unit (see page 292, left column lines 9-37, multiple terminals or slave units perform signal transmission and reception with the master unit or base station) and control means for setting, when the communications means does not detect a predetermined signal longer than a predetermined length of time (see page 292, left column, lines 27-37 a slave unit is capable of detecting time slot assignment flaw), an own communications channel within the predetermined length of time in a frame to transmit transmission data to the master unit using the communications channel (see page 292, left column, lines 27-37, slave unit contend for time slot to establish communication with the master unit or base station).

Regarding claims 2, and 18. Goodman discloses a data transmission system where the control means of each of the slave units transmits identification information to the master unit (see page 293 left column lines 1-18 the base station communicate with

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the terminals. It is inherent that terminals would transmit identification information to establish communication), and also transmits the transmission data to the master unit after receiving an enabling signal from the master unit (see page 293, left column lines 1-18, the base station sends acknowledgment to the enabled terminals regarding the data recently transmitted), and where the master unit transmits the enabling signal to any of the slave units corresponding to the identification information (see page 293, left column lines 1-30 times slots are reserved to certain terminal, which enables them to transmit data to the base station), when determining that the identification information received from each of the slave units is normal identification information (see page 293, left column, lines 1-20 the base station determines the status of received identification information and data).

Regarding claim 3 and 19. Goodman discloses a data transmission system where the control means of each of the slave units transmits the transmission data to the master unit (see page 296, left column lines 1-20, data is transmitted from the slave unit to the master unit. Thereafter, a feedback is broadcasted to all of the slave units regarding the received information), when receiving the enabling signal in a first reception period of a predetermined time width provided before an information transmission period in which the transmission data is transmitted (see age 293, left column lines 1-30. the enabled slave units are granted a time slot to transmit data to the master unit).

Claim Rejections - 35 USC § 103

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4-9 and 20-25 rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman in view of Duch et al (US 5,987,024). Hereinafter referred to as Duch.

Regarding claim 4 and 20. Goodman discloses, a transmission system, all the limitations of claims 1 and 17.

The transmission system of Goodman does not further comprise a storage means for storing a channel change condition, where the second reception period of a predetermined time width provided after the first reception period or the information transmission period, the control means of each of the slave units changes the communications channel when detecting that the channel change condition previously set in the storage means is satisfied. However, Duch discloses a system or a method to

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store channel change condition, where the second reception period is set different from the first reception period (see column 3 line 57-column 4 line 31. the channel change condition is applicable to avoid interference and packet collision). Thus, it would have obvious to the person of ordinary skill in the art at the time of the invention to use the change in channel condition as taught by Duch into the transmission system of Goodman. The motivation for using the change in channel condition as taught by Duch into the transmission system of Goodman being that it will reduce packet overlapping and packet collision between slave units.

Regarding claims 5-8, and 21-24. Goodman discloses, a data transmission system, all the limitations of claim 1 and 17.

Goodman does not disclose a data transmission system wherein the channel change condition of the first reception period and that of the second reception period are so set as to be different from each other. However, Duch discloses a system where the second reception period are so set as to be different from each other (see column 3 line 57-column 4 line 31. the reception periods are different from each other). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the Invention to use the change in channel condition as taught by Duch into the transmission system of Goodman. The motivation for using different reception periods as taught by Duch into the transmission system of Goodman being that it will avoid the occurrence of the same communication complications, interference and packet overlapping.

Regarding claim 9 and 25. Goodman discloses, a transmission system, all the limitations of claim 1 and 17.

Goodman does not disclose that the control means of each of the slave units does not transmit the transmission data to the master unit, when detecting any interference at least in the first reception period. However, Duch discloses a method where the slave unit do not transmit the transmission data to the master unit in the first reception period because interference detection. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the change of channel condition when interference occurs as taught by Duch into the transmission system of Goodman. The motivation for using the change in the channel condition as taught by Duch into the transmission system of Goodman being that it will eliminate the occurrence of interference and packet overlapping.

10. Claims 10 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman in view of Teller (US 2002/0013538).

Goodman discloses a transmission system where the master unit includes a communications means for wirelessly receiving the transmission data coming from each of the slave units, and processing means for processing the transmission data received from each of the slave units (see page 292 left column, the master unit or the base station is connected to the slave units wirelessly, and the base station processes all the data received from the slave units).

The transmission system of Goodman is a sensor attached to a body for use and for detecting biometric information about the attaching body, and the control means wirelessly transmits the biometric information detected by the sensor as the transmission data using the communications means. However, Teller discloses a system for health signs monitoring. The system uses a sensor attached to a body to detect biometric information about the attaching body, and the control means transmits the information collected to master unit wirelessly. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to incorporate the system for health signs monitoring as taught by Teller into the transmission system of Goodman. The motivation for using the health signs monitoring system as taught by Teller into the transmission system of Goodman is that it will allow patient to be monitored from a long distance and reduce the complicated wire connections.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman in view of Romao et al (US 4,594,609). Hereinafter referred to as Romao.

Goodman discloses all the limitations of claim 1.

Goodman does not disclose an information processing device for receiving the transmission data from the master unit, where the information processing device transmits a synchronizing signal with given cycles, and the master unit includes a reception period synchronous with each of the synchronizing signals-for receiving the synchronizing signals in each of the reception periods. However, Romao discloses a system where the information-processing device transmits a synchronous signal (see column 2, lines 38-45, see also column 3, lines 34-39) and the master unit includes a

reception period synchronous with each of the synchronizing signals-for receiving the synchronizing signals in each of the reception periods (column 4, lines 7-12, the scrambler and unscrambler are linked in time. Inherently, horizontal synchronization pulses are incorporated in a video signal in order to synchronize lines of video information at a TV receiver by those transmitted by the transmitter, wherein the receiver, the master unit, receives the synchronous pulses periodically upon the completion of each line of video information). Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the scrambling system of Romao into the data transmission system of Goodman. The motivation for using the scrambling system of Romao into the data transmission system of Goodman being that it will make the system more secure, and the system will operate in unison.

12. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goodman in view of Romao as applied to claim 11 above, and further in view of Jones et al (US 6,493,649). Hereinafter referred to as Jones.

Regarding claim 12. Goodman discloses that the base station sends a feedback to the terminal to identify the terminal that sent the packet (inherently, the master unit does include a storage means for storing at least identification information).

Goodman and Romao do not disclose and when receiving the synchronizing signal including the identification information stored in the storage means, the communications means of the master unit sets itself a reception period of a timing synchronous with the synchronizing signal. However Jones discloses a system where the synchronous signal for each of the reception periods contains identification

information (column 5 lines 35-38 the address information) and where the master unit comprises communication means for receiving in a wireless manner the synchronous signals during the respective reception periods (column 3 lines 20-25, wireless is through space) and storage means for storing at least the identification information contained in the synchronous signal (column 5 lines 47-51. the system compares the received address with its own. In order to be able to compare, must comprise a storage means). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have to synchronous signal of Romao include identification information as Jones in order for communication to be established between the correct transmitter and receiver.

Regarding claim 13 -16. Goodman and Romao disclose all the limitations of claim 11.

Goodman and Romao do not disclose receiving the synchronous signal through a time-continuous scanning operation, that the information-processing device transmits a data request signal at a timing synchronous with the synchronizing signal, that the storage means of the master unit includes the transmission data stored therein, and in response to the data request signal received in the reception period, the communications means of the master unit transmits the data stored in the storage means. However, Jones discloses a data transmission system where the communication means of the master unit sets itself the reception period of the timing synchronous with the synchronous signal, when receiving the synchronous signal through a time-continuous scanning operation (column 2 lines 26-27 and column 21

lines 63-67, where the monitoring for 20 ms is as scanning for a continuous period of time. As disclosed in the instant application at the third timing diagram of figure 2 of the disclosure, continuous period of time is interpreted as a window of a relatively long period of time. Moreover, inherently, the system adapts a scanning operation for plurality of times with predetermined cycles). The information processing device transmits a data request signal at a timing synchronous with the synchronizing signal (column 11 lines 52-55 and column 17 lines 27-29), and the storage means of the master unit includes the transmission data stored therein (box 226 in figure 21 and column 26 lines 55-61), and in response to the data request signal received in the reception period, the communications means of the master unit transmits the data stored in the storage means (column 5 lines 49-51, where the transponder is interpreted as the master unit transmitting the data stored). Transmission or reception of both an indicator of data transmission termination and a signal verifying such as acknowledgments are well known in the art of data communications.

Conclusion

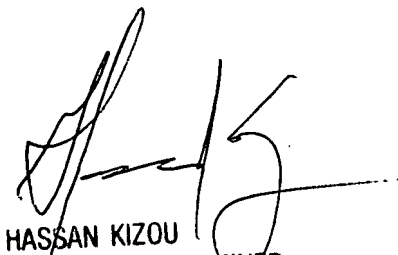
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mounir Moutaouakil whose telephone number is 571-270-1416. The examiner can normally be reached on Monday-Thursday (4pm-4: 30pm) eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit: 2616



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